

METHOD OF FABRICATING AN RF SUBSTRATE WITH SELECTED ELECTRICAL PROPERTIES

ABSTRACT OF THE DISCLOSURE

Method for fabricating a textured dielectric substrate (400) for an RF circuit. The method can include the step (104) of selecting a plurality of dielectric substrate materials, each having a distinct combination or set of electrical properties that is different from the combination of electrical properties of every other one of dielectric substrate materials. Selecting a textured substrate pattern (106) which is comprised of at least two types of distinct areas respectively having the distinct sets of electrical properties, with each distinct area dimensioned much smaller than a wavelength at a frequency of interest. Cutting the dielectric substrate materials (202, 204) into a size and shape consistent with the distinct areas of the selected pattern so as to form a plurality of dielectric pieces (206, 208). Arranging the dielectric pieces on a base plate (302) in accordance with the selected pattern to form the textured dielectric substrate.